Environmental Geology and Water Sciences

VOLUME 20, 1992

Editorial Board

PHILIP E. LaMOREAUX
Editor-in-Chief
Tuscaloosa, Alabama

ANN McCARLEY
Assistant Editor
Tuscaloosa, Alabama

ROBERT C. AHLERT
Buttzville, New Jersey

ERNEST E. ANGINO
Lawrence, Kansas

JOHN BAKER
Oak Brook, Illinois

M. GRANT GROSS
Washington, D.C.

PAUL E. HOSIER
Wilmington, North Carolina

J. H. HULL
Edinburgh, Scotland

RAPHAEL G. KAZMANN
Baton Rouge, Louisiana

ERNEST MANCINI
Tuscaloosa, Alabama

PHILIP A. MEYERS
Ann Arbor, Michigan

EDWARD W. REPA
Washington, D.C.

ED L. SCHRADER
Jackson, Mississippi

THOMAS A. SIMPSON
Northport, Alabama

S. FRED SINGER
Arlington, Virginia

ANDREW SPIEKER
Menlo Park, California

S. H. STOW
Oak Ridge, Tennessee

HARRY A. TOURTELOT
Denver, Colorado

H. R. WENK
Berkeley, California

STANLEY N. WILLIAMS
Tempe, Arizona

Editorial Advisory Board

C. R. ALDWELL
Dublin, Ireland

LARS JORGEN ANDERSON
Copenhagen, Denmark

YUAN DAOXIAN
Guangxi, China

RAFAEL FERNANDEZ-RUBIO
Madrid, Spain

GÜLTEKIN GÜNAY
Ankara, Turkey

HUSSEIN IDRIS
Cairo, Egypt

URI KAFRI
Jerusalem, Israel

VLADIMIR S. KOVALEVSKY
Moscow, USSR

M. RAMON LLAMAS
Madrid, Spain

PAUL G. MARINOS
Athens, Greece

GERMAN MÜLLER
Heidelberg, Germany

ESAD PROHIC
Zagreb, Yugoslavia

JAROSLAV VRBA
Prague, Czechoslovakia

STEFAN WOHNLICH
Munich, Germany

Springer International

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publishers.

The use of registered names, trademarks, etc., in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protection laws and regulations and, therefore, are free for general use.

Printed in the United States of America.

© 1992 by Springer-Verlag New York Inc.

Author Index

Alexander, D.: On the Causes of Landslides: Human Activities, Perception, and Natural Processes, 165

Arakel, A.V., and T. Hongjun: Heavy Metal Geochemistry and Dispersion Pattern in Coastal Sediments, Soil, and Water of Kedron Brook Floodplain Area, Brisbane, Australia, 219

Argese, E., G. Cogoni, L. Zaggia, R. Zonta, and R. Pini: Study on Redox State and Grain Size of Sediments in a Mud Flat of the Venice Lagoon, 35

Aschenbrenner, F., G.M. Richter, and J. Richter: Modeling Groundwater Quality in an Agriculturally Used Water Catchment, 43

Bernhard, C., R. Carbiener, A.R. Cloots, R. Froehlicher, Ch. Schenck, and L. Zilliox: Nitrate Pollution of Groundwater in the Alsatian Plain (France)—A Multidisciplinary Study of an Agricultural Area: The Central Ried of the Ill River, 125

Bosch, A.P., F.S. Martos, J.L.M. Vidal, and F. Navarrete: Groundwater Problems in a Semiarid Area (Low Andarax River, Almeria, Spain), 195

Briz-Kishore, B.H.: Drought Remedial Measures through Resistivity Investigations in a Typical Crystalline Region, 79

Conrad, G.E.: Editorial—Interstate Cooperation and Environmental Protection, 1

DeLaune, R.D., W.H. Patrick, Jr., and C.J. Smith: Marsh Aggradation and Sediment Distribution Along Rapidly Submerging Louisiana Gulf Coast, 57

Endo, T.: Confined Groundwater System in Tokyo, 21

Jasko, S.: Environmental Study of Valley Fill Sediments, 213

Kehew, A.E., and M.K. Brewer: Groundwater Quality Variations in Glacial Drift and Bedrock Aquifers, Barry County, Michigan, U.S.A., 105

Kesel, R.H., and E.G. Yodis: Some Effects of Human Modifications on Sand-Bed Channels in Southwestern Mississippi, U.S.A., 93

Kooner, Z.S.: Adsorption of Copper onto Goethite in Aqueous Systems, 205

Kresic, N.: Book Review—*Quantitative Karst Hydrogeology with Elements of Groundwater Protection*, 73

Kresic, N., P. Papic, and R. Golubovic: Elements of Groundwater Protection in a Karst Environment, 157

Mitchell, J.K.: Editorial—Geotechnology and Its Importance in Economic Growth, the Environment, and National Security, 155

Rosswall, T.: Editorial—The International Geosphere-Biosphere Programme: A Study of Global Change (IGBP), 77

Shimano, Y.: Characteristics of the Stream Network Composition of Drainage Basins in the Japanese Islands, 5

Söderström, M.: Geostatistical Modeling of Salinity as a Basis for Irrigation Management and Crop Selection—A Case Study in Central Tunisia, 85

Tase, N.: Groundwater Contamination in Japan, 15

Thorn, R.H., and C.E. Coxon: Hydrogeological Aspects of Bacterial Contamination of Some Western Ireland Karstic Limestone Aquifers, 65

Todorov, T.: Book Review—*Selected Bibliography of Environmental Geology*, 233

Uma, K.O.: Origin of Acid Mine Drainage in Enugu, 181

Weeks, O.L., R.S. Mansell, and S.W. McCallister: Evaluation of Soil Top-Cover Systems to Minimize Infiltration into a Sanitary Landfill: A Case Study, 139

Williams, T.M.: Diagenetic Metal Profiles in Recent Sediments of a Scottish Freshwater Loch, 117

Title Index

Adsorption of Copper onto Goethite in Aqueous Systems: Z.S. Kooner, 205

Book Review—*Quantitative Karst Hydrogeology with Elements of Groundwater Protection:* N. Kresic, 73

Book Review—*Selected Bibliography of Environmental Geology:* T. Todorov, 233

Characteristics of the Stream Network Composition of Drainage Basins in the Japanese Islands: Y. Shimano, 5

Confined Groundwater System in Tokyo: T. Endo, 21

Diagenetic Metal Profiles in Recent Sediments of a Scottish Freshwater Loch: T.M. Williams, 117

Drought Remedial Measures through Resistivity Investigations in a Typical Crystalline Region: B.H. Briz-Kishore, 79

Editorial—Geotechnology and Its Importance in Economic Growth, the Environment, and National Security: J.K. Mitchell, 155

Editorial—Interstate Cooperation and Environmental Protection: G.E. Conrad, 1

Editorial—The International Geosphere-Biosphere Programme: A Study of Global Change (IGBP): T. Rosswall, 77

Elements of Groundwater Protection in a Karst Environment: N. Kresic, P. Papic, and R. Golubovic, 157

Environmental Study of Valley Fill Sediments: S. Jasko, 213

Evaluation of Soil Top-Cover Systems to Minimize Infiltration into a Sanitary Landfill: A Case Study: O.L. Weeks, R.S. Mansell, and S.W. McCallister, 139

Geostatistical Modeling of Salinity as a Basis for Irrigation Management and Crop Selection—A Case Study in Central Tunisia: M. Söderström, 85

Groundwater Contamination in Japan: N. Tase, 15

Groundwater Problems in a Semiarid Area (Low Andarax River, Almeria, Spain): A.P. Bosch, F.S. Martos, J.L.M. Vidal, and F. Navarrete, 195

Groundwater Quality Variations in Glacial Drift and Bedrock Aquifers, Barry County, Michigan, U.S.A.: A.E. Kehew and M.K. Brewer, 105

Heavy Metal Geochemistry and Dispersion Pattern in Coastal Sediments, Soil, and Water of Kedron Brook Floodplain Area, Brisbane, Australia: A.V. Arakel and T. Hongjun, 219

Hydrogeological Aspects of Bacterial Contamination of Some Western Ireland Karstic Limestone Aquifers: R.H. Thorn and C.E. Coxon, 65

Marsh Aggradation and Sediment Distribution Along Rapidly Submerging Louisiana Gulf Coast: R.D. DeLaune, W.H. Patrick, Jr., and C.J. Smith, 57

Modeling Groundwater Quality in an Agriculturally Used Water Catchment: F. Aschenbrenner, G.M. Richter, and J. Richter, 43

Nitrate Pollution of Groundwater in the Alsatian Plain (France)—A Multidisciplinary Study of an Agricultural Area: The Central Ried of the Ill River: C. Bernhard, R. Carbiener, A.R. Cloots, R. Froehlicher, Ch. Schenck, and L. Zilliox, 125

On the Causes of Landslides: Human Activities, Perception, and Natural Processes: D. Alexander, 165

Origin of Acid Mine Drainage in Enugu: K.O. Uma, 181

Some Effects of Human Modifications on Sand-Bed Channels in Southwestern Mississippi, U.S.A.: R.H. Kesel and E.G. Yodis, 93

Study on Redox State and Grain Size of Sediments in a Mud Flat of the Venice Lagoon: E. Argese, G. Cogoni, L. Zaggia, R. Zonta, and R. Pin, 35